REVOX

Re:connect
M 203

RS232 Interface
Sharp

Dominating Entertainment.
Revox of Switzerland.

Attention!

After updating the M203 firmware to version 2.00 or higher, we recommend completely resetting the M203 interface by pressing the **Disable** softkey on setup page #2 for several seconds, until setup page #1 automatically appears. Please refer also to page 8 ff.

Note Sharp TV

All Sharp televisions from 26 inch of screen size and serial interface can be controlled with the Sharp version of the M203. Status: May 2010

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M203 Sharp

With the Re:connect M203, Revox offers an interface, for the intelligent control of many of the Sharp video products.

The correct picture input is automatically selected at the television with the help of the interface. Additionally, the next or previous TV programme can be selected for the television, through the M218 wall-mounted keypad.

Multiroom Planer V2.00

The new Multiroom Planner doesn't just calculate the correct address assignment for the M219 Side room amplifiers and M217 Wall-mounted displays, it also calculates the slot addresses for the M200 series Re:control products in the side room. Take advantage of the possibility to be able to determine in advance, all M203, M217 and M219 addresses simply and quickly and at the same time save the information as system documentation. You will find more information about addressing the M203 in the side room, on Page 6 of this manual.
You can download the new Multiroom Planner V2.00 free-of-charge from the download area of the Revox Homepage, under www.revox.com.

New features from software V2.00

From software version 2.00, the M203 can be connected not only to an M51 but also to the M219 Side room amplifier.

As a result, a Sharp television can also be controlled from an side room, using the M219 Side room amplifier. The option of connecting an M203 interface to an M219 exists with the first four Side room amplifiers for each zone. As a result, a total of 16 Side room amplifiers can be connected with an M203 interface in a Revox Multiroom system with 4 different zones.

In the same way as with the setup of an M51, you define which video input at the Sharp televisions activated by which M219 audio source, through the M203 Setup. The local inputs Local 1 – 3 at the M219 can be used for the control, as well as the audio sources of the Multiroom Central unit.

Important advice:
If you want to use the software version 2.00, the complete Revox system must be updated to the level 2.00, or higher.

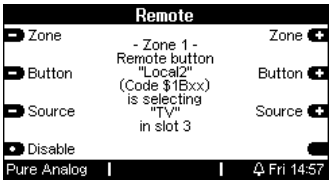
Switching between stations using the Revox wall-mounted keypad

The M203 offers the option of selecting specific stations using the skip keys (**<>**) on an M218 wall-mounted keypad, once the TV tuner has been selected. This comfort function requires two settings:

1/2 **Audio IN assignment**

M51 in combination with M203
The sound input, e.g. TV, Aux1, Optical, etc., of the remote device must be assigned to one of the following Remote buttons in the **Remote** menu:

- Local
- Local 1
- Local 2
- Local 3



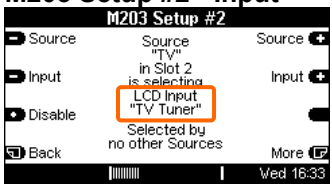
Assignment example

M219 in combination with M203
There is no need to make an assignment through the **Remote** menu with an M219, because its local audio inputs (Local 1-3) are always assigned to the IR commands *Local, Local 1, Local 2* and *Local 3.* Continue with point **2**/2

Note: **Monitor-only devices**
This comfort function is only available with TV models with an integrated TV tuner. It cannot be selected in case of monitor-only devices without a TV tuner.

2/2 **TV Tuner assignment**

M203 Setup #2 - Input



The second assignment affects **Setup #2** in the M203. Here, the physical audio source of the TV sound that was assigned to a *Local Remote button* in the first step, is assigned to the television's **TV Tuner**.

In the example above, the audio source **TV** calls the television tuner. As well as the Multiroom central unit sources, a side room amplifier also offers its own local Inputs 1-3 for the **TV Tuner** assignment.

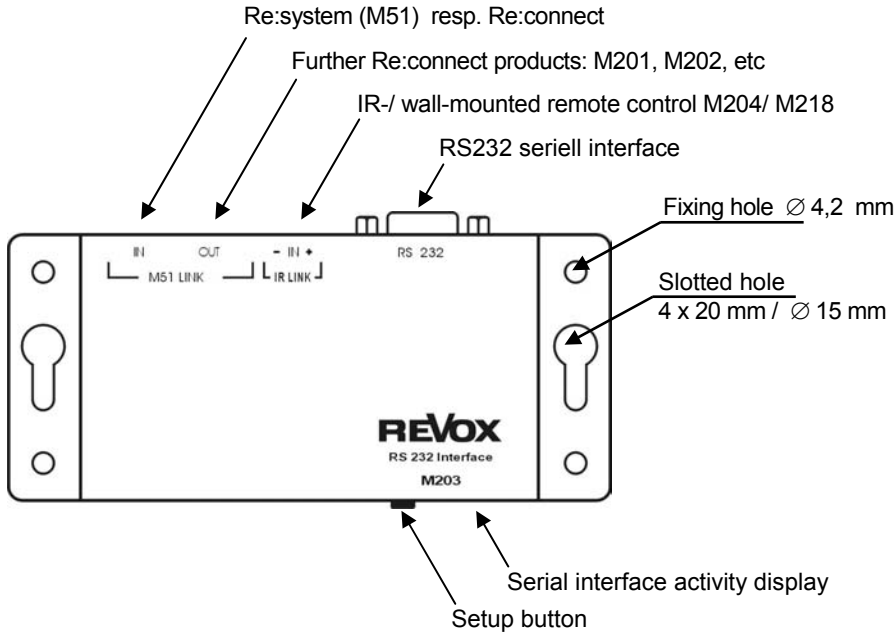
Installation

The M203 interface can be installed easily and quickly. There are two types of fixing available.

1) The four outside fixing holes (∅ 4,2 mm) are used for a permanent installation.

2) Revox recommends using the two slots on the side for a variable installation.

Connection plan



Connection:
M203 with **M51/ M219**

Socket: ***M51 LINK IN***
Setup: **-**
M219: ***Yes*** ☑

The M203 interface is connected with the **M51 LINK** socket on the back of the M51 or the M219 **LINK** socket on the Side room amplifier, using the supplied telephone cable.

If you want to use a different cable, you should only use a ***non-crossed***, 4-core telephone cable with an RJ11 plug (6P4C modular).

Max. cable length: 100 m
Max. cable resistance: 0.1 Ω /m

Connection:
M203 with external interfaces

Socket: ***M51 LINK OUT***
Setup: **-**
M219: ***Yes*** ☑

The M203 interface is designed for the connection of further external interfaces:

M51 operation
Currently, the following further products can be connected with the M51::

- **M200** Domotic interface
- **M201** IR interface
- **M202** Ethernet interface
- **M203** (2. Interface)
- **M217** Display

M219 operation
With the M219, the **LINK OUT** can be used for the connection of an M217 Display.

Use a ***non-crossed***, 4-core telephone cable with an RJ11 plug (6P4C modular).

Max. cable length: 100 m
Max. cable resistance: 0.1 Ω /m

Connection:
M203 with seriell interface

Socket: ***RS232***
Setup: **# 4 – from page 8**
M219: ***Yes*** ☑

Using the serial RS232 interface, The M203 interface can be used with other (TV) devices, which also have a serial interface.

Many of the Sharp video products have a serial interface and are therefore very easy to integrate into the Revox World.

The M203 Interface is also suitable as an interface to domestic facility management systems such as ***AMX*** or ***Crestron***, which have a special Revox protocol.

Even a Windows PC with the M230 control program can be connected to the serial interface on the M203.

You will find further information from Page 8.

Serial cables with a maximum length of 10 metres can be used.

Connection:
M203 with IR controller

Socket: ***IR-Link***
Setup: **-**
M219: ***Yes*** ☑

The connection to an IR receiver or a wall-mounted remote control is done through the 3-pin, screw-fixable Phoenix plug connection.

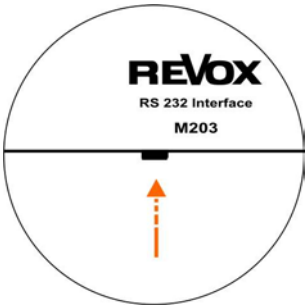
Revox recommends the use of a 2-core screened cable (microphone cable), where the screening is used as ground. This cable may be a maximum of 30 metres in length.

Please ensure that you use the correct polarity when setting up as otherwise you might damage your equipment.

Symbols:
+ → Pos. voltage. 20V (DC)
IN → IR Signal
- → Ground

The maximum number of IR receivers that can be switched in parallel per M203 is 3.

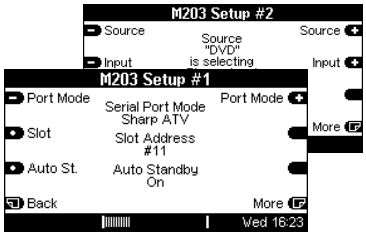
Setup key



Using the Setup key, you call up the M203 menu, which is shown in the **M51** display.

If the M203 interface is connected with an **M219** Additional room amplifier, the M51 display is also used.

In the case of an **M10** installation, display is done using the M230 service program or M-Scope.



Using the Softkeys Back More you can get to pages **#1** and **#2** Setup page #2 only appears if a video device has been selected on page #1 as *Serial Port Mode*.

Setup #1 @ M51

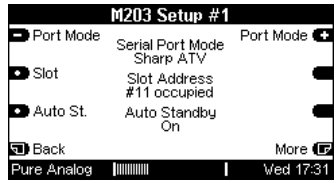
Function: **Addr. assignment**
Display: ***Slot Address***
Connection: **M51-Link**
M219: ***Yes*** ☑

M51 operation (fig. page 9+10)

A different address must be assigned through the slot address, if a second M203 (M200) is connected to the M51 **Link** output, so that both don't occupy the same slot address. This would cause errors. In the case of a double address assignment, neither of the two M203s (M200s) would be shown in the Version list.

Slot address: **#11** or **#12**

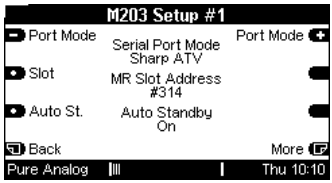
The two slot addresses 11 and 12 are available for selection. The following message appears if the selected address is already assigned:



Setup #1 @ M219

M219 operation - fig. Page 9+11

In respect of the M219, the slot address defines the assignment to the Side room amplifier. A M203 can only be connected to an Side room amplifier within the address range x1 – x4**.**



The slot address defines which Side room amplifier the M203 interface should communicate with. This is necessary because of the bus system, although in each case, the M203 is individually connected with the M219. Only one M203 interface can be used per Side room amplifier.

Address assignment : Zone 1-4

M219/ 217		M200/ M203
x 1	⇨	x 11
x 2	⇨	x 12
x 3	⇨	x 13
x 4	⇨	x 14
x 5		
x 6		
x 7		
x 8		

x 1 – x 4:	**only M219**
x 5 – x 8:	M217 or M219
x 11 – x 14:	**only M200 / M203**

Example

In Figure A, an M203 could be connected to each of the Side room amplifiers 31 – 34. The M219 amplifiers 35 and 38 on the other hand may not be connected with an M203 interface.

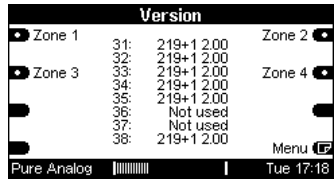


Fig A. Multiroom version list / Zone 3

The figure below shows the Multiroom version list from Zone 3 for the M203 interfaces. You get to this menu by repeatedly pressing the **Zone** softkey in the sub-menu (M51, M230 etc.) of: Setup ⇨ Multiroom ⇨ Version ⇨ Zone x

In this case, an M203 interface was assigned to the Side room amplifier with address 4, through the slot address 314. Amplifiers 1 – 3 do not have an M203.

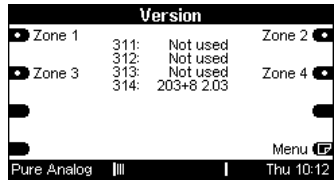


Fig B. Multiroom version list / Zone 3

Setup #1 – RS232 Modus

Function: **RS232 interface**
Display: ***Serial Port Mode***
Connection: **RS232**
M219: ***Yes*** ☑

The function of the serial interface (**Serial Port**) can be configured for the following applications:

- **RS-232 Link**
- **RS-232 Filtered**
- **Gefen HDMI Switcher *4x2, 4x1***
- **Gefen HDMI Switcher *6x2***
- **Sharp ATV***
- **Sharp DTV***

* All Sharp televisions from 26 inch of screen size and serial interface

ATV: Using the integrated analog TV tuner

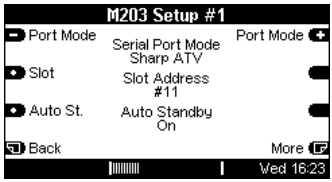
DTV: Using the integrated digital TV tuners (DVB-T or DVB-C)

Please take note of the important information on page 8 relating to a *complete reset* of the M203.

Setup #1 – Auto Standby

Function: **Auto Standby**
Display: ***Auto Standby***
Connection: **RS232**
M219: ***Yes*** ☑

The **Auto Standby** function enables the TV to remain switched on, even in the case of selected audio sources that do not activate a video input at the TV, e.g. the M51 radio tuner.



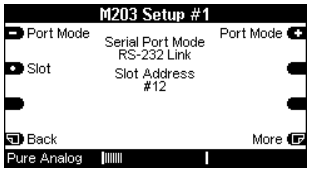
The **Auto Standby** option is only shown in the menu if **Sharp** has been selected as *Serial Port Mode*.

Auto Standby: ON
The television switches itself **off** automatically as soon as an audio source is selected, which either cannot activate a video input, e.g. Tuner, or which is **disabled**

Auto Standby: OFF
After the television has been switched on, it remains on **permanently** until the M51/ M219 is switched off, irrespective of which audio source is selected.

RS-232 Link

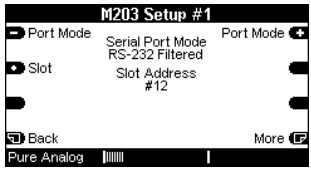
Standardised serial interface (RS232 protocol) for connection to a PC or another serial interface.



Application:
You should select this setting if you want to use the **M230** control program for PCs or if you want to access the Revox System through domestic facility management equipment such as Crestron and AMX.

RS-232 Filtered

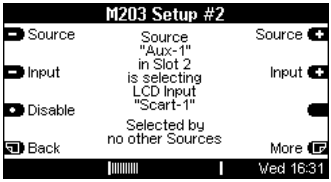
Data-reduced RS232 protocol. Only M51-specific data is transferred, so-called display and broadcast messages.



Application:
Simple controllers with low data traffic requirements.

Video Controller

If a video controller for a video product was selected on page #1 **Port Mode**, a second menu page, **Setup # 2** is available. This page enables you to selectively switch on and/or between video inputs on a Sharp device or an HDMI Switcher from the Gefen company, dependant on the selected M51/ M219 source.



Example M200 with M51:
A SAT receiver can conveniently be integrated through the automatic selection of the video input on the TV by the M51. Its picture output is connected, for example, to the **Scart-1** input on the Sharp TV, while the audio signal is connected to the **Aux-1** input on the M51.
Please also refer to the picture on the next page.

If you now select the source ***SAT*** (***Aux-1***) at the M51, the Sharp TV automatically transmits the SAT receiver picture over the input **Scart-1** and the sound from the SAT receiver is transmitted over the M51.

The convenient integration can of course also be used for the M51's integrated DVD player. *Please refer to the picture on the next page – Connection : Video 1).*

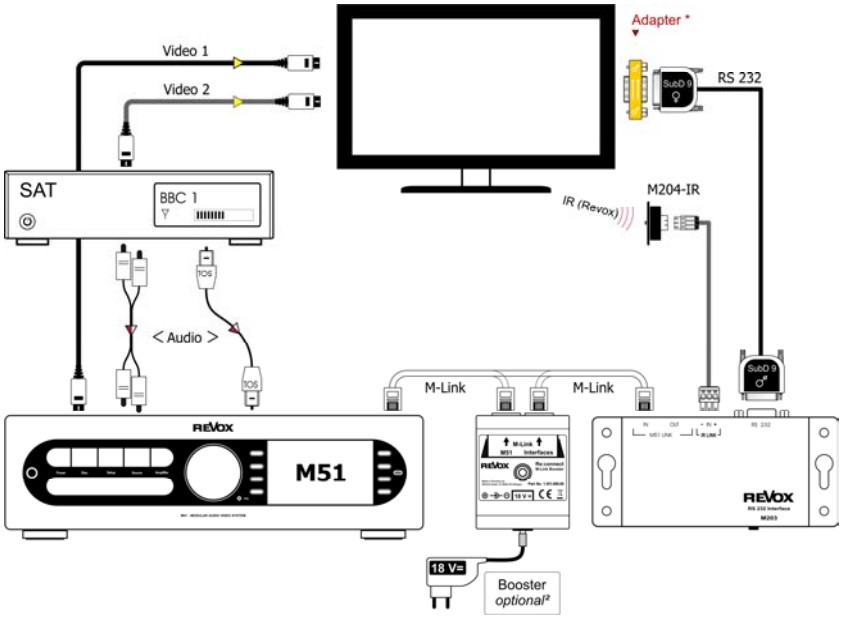
The audio source and video input links referred to in the example are defined in Setup #2. You will find an exact description of the links, starting from page 16.

Complete reset?

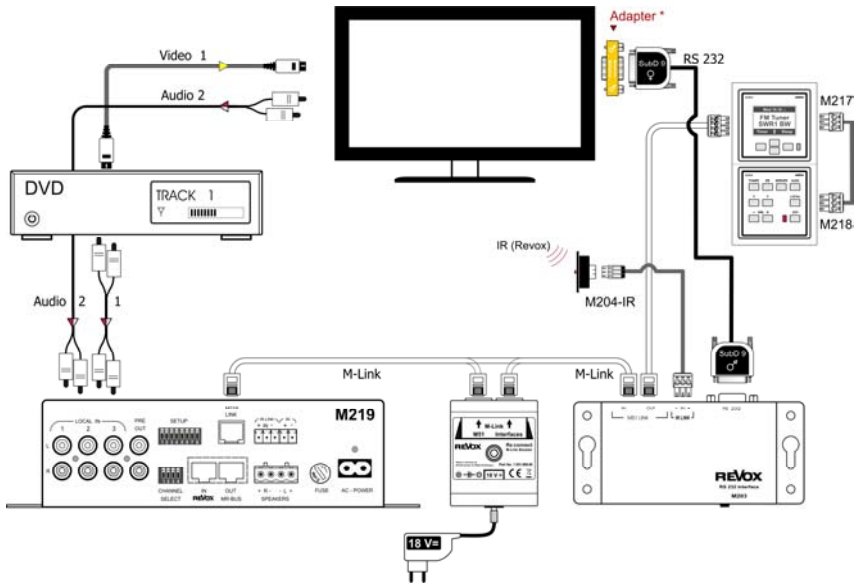
Yes
You should always carry out a complete reset with each new configuration as well as when changing to another TV model. To do this, press the **Disable** softkey on Setup page #2 and keep it pressed, until the system automatically returns you to page 1.

No
A complete reset is **not** necessary with an assignment change within a TV model.

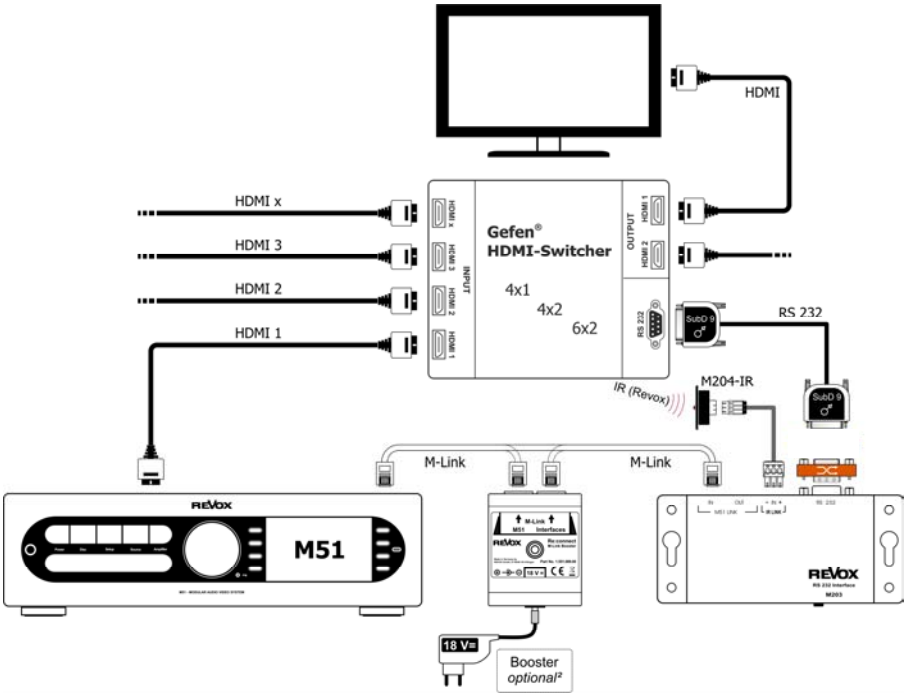
Connection plan: Sharp TV with M51



Connection plan: Sharp TV with M219

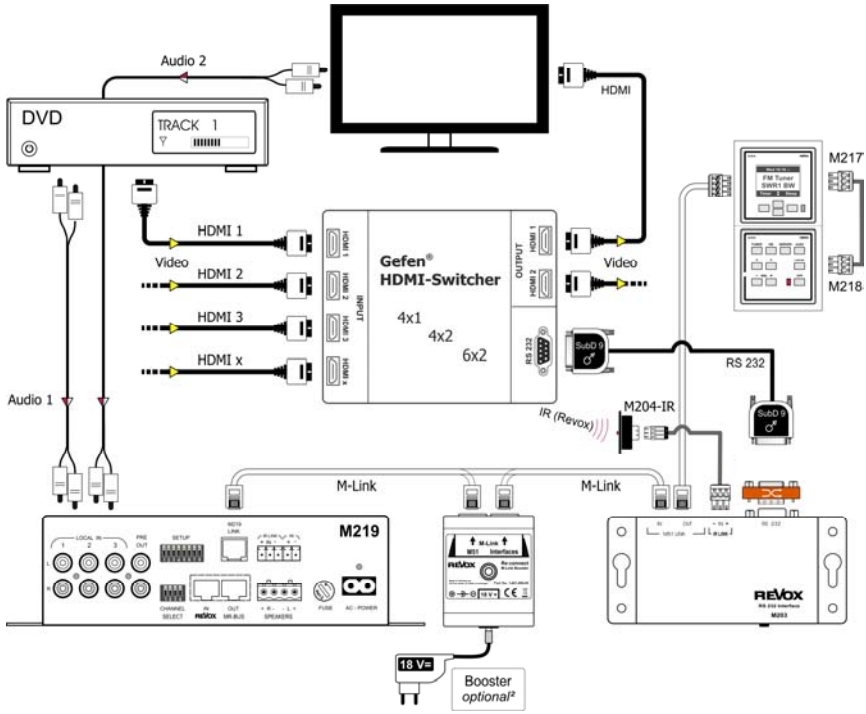


Connection plan: Gefen HDMI switcher with M51



Note
The HDMI output on the M51 is only available if the DVS module is installed
Gefen® : Registered trademark of the Gefen Company/US

Connection plan: Gefen HDMI switcher with M51



Gefen HDMI Switcher 4x2, 4x1 Switcher 6x2

Control software for the HDMI Switcher from the Gefen Company (www.gefen.com)

The HDMI inputs on the HDMI switcher are activated, dependant on the M51/ M219 source. If there is no assignment, the HDMI input that was last selected remains active. Setting is done on page #2 in the M203 Setup

Product features:
- 4 HDMI inputs (4x1,4x2)
- 6 HDMI inputs (6x2)

A crossed Sub-D cable is required for the transmission.
Connection type: **Plug-Plug**

For this reason, you should use the enclosed crossover adapter with the supplied Revox 1:1 cable.

9-Pol	⇒	9-Pol
Pin 2	⇒	Pin 3
Pin 3	⇒	Pin 2
Pin 5	⇒	Pin 5

Max. cable length RS232: 10 m

Gefen products are freely available through specialist retail outlets.

Sharp TV (ATV, DTV)

Control software for the **Sharp** televisions. A serial Sub-D cable (1:1) is required for the transmission.
Connection type: **Plug - Socket**

For this reason, you should use the enclosed gender adapter with the supplied Revox cable.

9-pin	⇒	9-pol
pin 5	⇒	pin 5
pin 2	⇒	pin 2
pin 3	⇒	pin 3

Note: The serial interface (RS232) of the TV is not yet configured for control by an external device. There is the need of an initial commissioning of it. Please follow the instructions on page 13.

Max. cable length RS232: 10 m

Activating the RS232 interface at the Sharp TV

Following the initial commissioning of a Sharp television, its serial interface (RS232) is not yet configured for control by an external device. The RS232 interface is only permanently activated once a one-off initialisation command is sent through the M203 interface to the Sharp television. Activation is done with the following steps:

1) Carry out a complete reset (see Page 8)
2) Make the settings as described in *"Setup #2 – AV Assignment", from Page 14.*
3) Switch on the M51/M219 with FM Tuner. If no FM Tuner is installed, select a source that is not linked to a television video input in Setup #2.
4) Switch on the Sharp television with the original remote control, using the *Power* button.
5) Wait until the television is ready to receive.
6) Now select a source at the M51 (or at the M219 Side room amplifier), which is linked to a television video input in Setup #2.
7) The television is now initialised and retains the facility to be controlled through the serial interface, even when it is switched off.

Please note:
If the television is changed, the process described above has to be repeated.

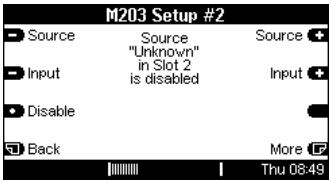
Special characteristic on Input 3
The ***Input 3*** can only be addressed by the M203 if there is already a signal at its input. If this is not the case, the television recognises this and ignores the control command.

Setup #2 – AV Assignment

Function: **AV Assignment**
Display: ***Source***
Connection: **RS232**
M219: ***Yes*** ☑

Unknown audio sources

"Sources unknown" can still be present during the initial configuration, caused by the swap or the de-installation of modules.



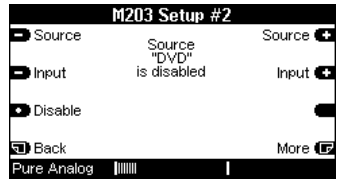
Following switch-on, it can take a few seconds until the M203 interface has identified all the M51 / M219 sources and until the *Source "Unknown"* message disappears.

Any remaining unknown sources should be deleted by pressing the **Disable** softkey twice and then pressing the **Delete** softkey.

If too many unknown sources are present, we recommend completely resetting the M203 interface by pressing the **Disable** softkey for several seconds, until Page #1 automatically appears.

1. Selecting audio source

To start with, select the M51 / M219 audio source that later should activate a particular video input on the Sharp television/ HDMI Switcher, using the **Source** ± softkey.



Using the **Source+** and **Source-** softkeys, you can step forwards and backwards respectively, through a loop of audio inputs, which are currently available on the M51 / M219.

If the name of an audio source has been changed, the modified name also appears in the list.

An *"Unknown" Source* must be deleted manually. You will find more information about this in the previous section.

Intelligent Audio Sources

The M203 differentiates between 3 type of audio sources:

1. Permanent sources
2. Semi-intelligent sources
3. Intelligent sources

1. Permanent sources
In the case of permanent audio sources, including for example the *Tuner* source, the television is switched on immediately with the corresponding video input that was assigned to it on Setup page #5. Manual switch-on or switch-off through the remote control is not possible.

2. Semi-intelligent sources
In the case of semi-intelligent sources, you can define through the remote control, whether the television should be switched on with the previously defined video input or not. Such sources have respectively **TV ON** and **TV OFF** function keys in the remote control menu. The semi-intelligent sources, such as the M37 Music Server, store the last selected state.
If, for example, the video input from the *Server* was activated at the television using the remote control, the television is automatically activated next time this source is selected.

3. Intelligent sources
In the case of intelligent sources, it is a question of sources, which, dependant on setting or medium, can transmit a video signal to accompany the audio signal. An example of an intelligent source is the DVD/CD M51 source. If there is a music CD on the M51 drive, the television is not switched on because in this case, no video is required. If, on the other hand, a DVD is identified, the television is switched on.

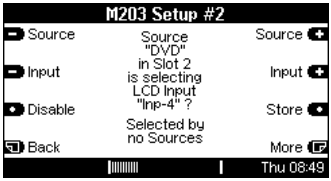
Source – Switch on *Yes/No*
DVD/CD:
CD Switch on: **No** ☐
DVD Switch on: **Yes** ☑

SAT:
Radio Switch on: **No** ☐
TV Switch on: **Yes** ☑

Setup #2 – AV Assignment

2. Assigning video inputs

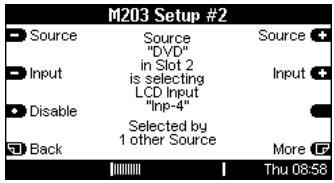
In the second step, a video input from the television / HDMI Switcher is assigned to the selected M51/ M219 audio source, using the **Input** ± softkey. Using these softkeys, you can step through a loop of video inputs that are available to the television.



As the televisions that can be selected from have different video inputs, only those video inputs that the corresponding TV device has, are actually displayed.

The softkey **Store** appears as confirmation each time the **Input** is changed. Press **Store** if you want to save your changes. Otherwise the original setting is retained.

The following display appears, if a video input is called by one or more audio sources:



Assignment example

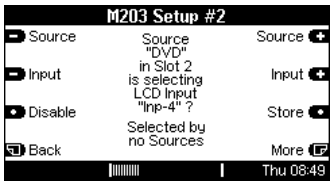
This example shows you that, as well as the currently displayed audio source (DVD), a further audio source has also been assigned to this video input. Using the **Source** ± softkeys, you can search for the audio source that also calls this video input.

Several audio sources are always required if, for example, the M300/M301 Video switch is used, which bundles several video sources together to one video input on the television.

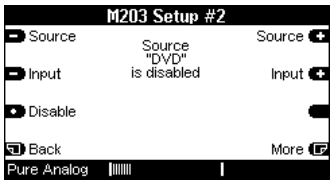
Setup #2 – Disable

Disable assignment

Using the **Disable** function, you can undo or disable the assignment of an audio source to a video input.



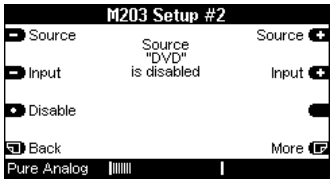
To do this, select the required audio input using the **Source ±** softkeys and then press the **Disable** softkey. The **Store** softkey then appears that you need to press to confirm your change.



If you don't press **Store**, the original setting is retained.

Reset assignment

If you want to return the settings in Setup #2 menu to the factory settings, simply press and hold the **Disable** softkey until the Setup**- #1** page appears again.



This resets all input assignments and restores the factory settings.

Guarantee

The guarantee period is 24 months from the date of purchase.

Your dealer should be your first contact if you need service. If he can't give you the help you need, send your M203 interface carriage free and without any accessories to your national Sales Office.

Please supply a complete description of the problem and a full return postal address.

Included in delivery

- M203 Interface
- M51-Link cable (2 m)
- Serial PC cable
  (1:1 - length 3 m)
  (Plug-Plug)
- RS232 Crossover adapter
- Gender adapter
- Accessories (Installation)
- Manual

Technical data

IR-LINK:

+	→	Positive voltage 10-20V (DC)
IN	→	IR signal
-	→	Ground (GND)

Dimensions:	113 x 25 x 50 mm (WxHxD)	
Weight:	150 g	
Power consumption:	35 mA	(without IR receiver)
Max. cable length:	100 m	(M203- M51/ M219)
Max. cable length:	30 m	(M203 - IR receiver)

E & OE
Product subject to technical modifications.

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